

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/678,175	KONRAD ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Helen Rossoshek	2825	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Appeal Brief filed 10/31/2005.
2. ☒ The allowed claim(s) is/are 1-3, 6, 7, 9-14, 16-19, 22, 24-27, 29-33, 35-39. Renumbered (37 CFR 1.126).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
|---|--|

A. M. Thompson  
Primary Examiner  
Technology Center 2800

### **DETAILED ACTION**

1. This office action is in response to the Application 09/678,175 filed 09/28/2000 and Appeal Brief filed 10/31/2005.

2. Claims 1-3, 6, 7, 9-14, 16-19, 22, 24-27, 29-33, 35-39 remain pending in the Application.

3. Upon reconsideration, Applicant's arguments in the Appeal Brief, filed 10/31/2005, are persuasive. The Final rejection of Detailed action dated 04/04/2005 has been withdrawn.

### **EXAMINER'S AMENDMENT**

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

5. Authorization for this examiner's amendment was given in a telephone interview with Steven Laut (Registration No. 47,736) on 01/18/2006.

6. The application has been amended as follows:

#### **To claims**

Claim 1 line 12 after "dividing" delete "a" insert --the--

Claim 1 line 12 after "representing" delete "a" insert --the--

Claim 1 line 1 after "method" insert --for applying partitioning logic to partially optimized programmable logic arrays--

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Claim 10 line 1 after "method" insert --for applying partitioning logic to partially optimized programmable logic arrays--

Claim 29 line 1 after "method" insert --for applying partitioning logic to partially optimized programmable logic arrays--

Claim 36 line 12 after "divide" delete "a" insert --the--

***Allowable Subject Matter***

7. The following is an examiner's statement of reasons for allowance: Claims 1-3, 6, 7, 9-14, 16-19, 22, 24-27, 29-33, and 35-39 are allowed. Prior art of record does not teach a method of partitioning a large programmable logic array (PLA) for controlling a power consumption of PLA by determining an **optimum splitting variable for dividing** PLA into at least two sub-PLAs by **avoiding unbalanced** columns in an AND plane of a set of equations representing the PLA, and **selecting a column with smallest overhead** in the AND plane of the set of equations representing the PLA, wherein a first sub-PLA of the at least two sub-PLAs includes products in which the splitting variable is in complemented form, a second sub-PLA includes products in which the splitting variable is in uncomplemented form and the splitting variable corresponding to a specific input, output and product in the set of equations representing the PLA; dividing the set of equations representing the PLA into a first set of equations representing the first sub-PLA and a second set of equations representing the second sub-PLA based on the splitting variable as claimed.

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

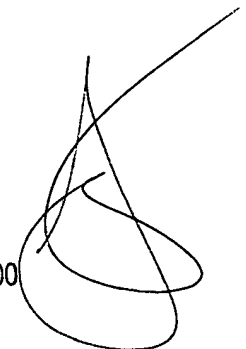
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen Rossoshek whose telephone number is 571-272-1905. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner  
Helen Rossoshek  
AU 2825

A. M. Thompson  
Primary Examiner  
Technology Center 2800

A handwritten signature in black ink, consisting of a large, stylized loop with a long, sweeping line extending upwards and to the right.